# For Graduating Ph.D.s and Post Docs

# **CFD Developer**

#### **General Summary:**

This position reports to the CFD Group Leader in Kannapolis, NC. Responsible for developing CFD software and processes for aerodynamic simulations in a High-Performance Computing environment.

#### Requirements:

### Must be a US Citizen, or already hold a green card.

#### **Key Responsibilities:**

- Promote teamwork and effective communications to develop working relationships between all personnel and departments.
- Contribute to the department's development of an in-house, low speed, high Reynolds Number fluid simulation environment
- Research, synthesize, test, and integrate state-of-the-art simulation features
- Efficiently write and de-bug programs
- Document programs
- Verify and Validate in-house or commercial software
- Enhance and extend the User Interface for set-up and execution of engineering simulations
- Follow and maintain safety standards in all venues
- Assume any responsibilities delegated by his seniors

#### **Education and Work Experience:**

Must have a Ph.D. in Physics, Engineering, Mathematics or Computer Science, Experience working with OpenFOAM desirable.

# Specialized Knowledge and Skills:

- Interest and aptitude for numerical algorithms
- Strong analytical skill and independent problem-solving skills
- Strong written and oral communication, teamwork, and people skills

#### **Equipment and Applications:**

- Knowledge of: Linux and Windows, C++, Python and Fortran.
- Knowledge of Paraview preferred.

# **Work Environment Physical Demands:**

An ability to work and prioritize within a high pressure, time sensitive environment while retaining a methodical approach is essential. The role requires a willingness to work flexible hours and possibly some weekends.

This position may require lifting to 50 pounds, repeated bending, squatting and manual dexterity. Fast-paced work environment requiring heavy mental demands. All employees must ensure compliance with the Company Health and Safety Policy, and all relevant other statutory Health and Safety legislation.